

Available online at www.sciencedirect.com**ScienceDirect**

Procedia - Social and Behavioral Sciences 187 (2015) 318 – 323

Procedia
Social and Behavioral Sciences

PSIWORLD 2014

Management skills assessment using 360° feedback - MSF 360

Mihalcea Alexandru^a, Mihalcea Diana^{b*}^a Titu Maiorescu University^b Romania Hipermarche

Abstract

The present study was based on the elaboration of a short 360 feedback questionnaire (MSF 360) which can be rapidly utilized in order to assess the management skills of retail companies. The reliability analysis has indicated an acceptable internal consistency and a confirmatory factorial analysis (CFA) was also conducted. The MSF 360 considerably increased the predictive ability of some performance indicators, beyond that provided by scales of CPI 260 and MLQ. Following studies are necessary in order to increase the reliability degree of MSF 360 and the representativeness of the sample of subjects.

© 2015 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Peer-review under responsibility of the Scientific Committee of PSIWORLD 2014.

Keywords: management skills; 360 degree Feedback; managerial performance; performance prediction; soft skills

1. Introduction and theoretical perspectives

The type of feedback known as 360° or the multiple sources evaluation is a type of assessment which is more and more used within the organizational practice when we refer to performance management (Lepsinger & Lucia, 2009; Corbin, 2012; Novac, 2006). Multiple sources assessment uses data offered by superiors, colleges, subordinates and, in some cases, even by clients or contractors of an employee. Multiple sources offer a high validity of information collected by an employee (Lepsinger & Lucia, 2009), because deformed perceptions or assessment biases made by someone can be balanced by opinions of other people (McIntire & Miller, 2010; Brett & Atwater, 2001).

The assessment made by the subordinates, under the conditions of anonymity (Bailey & Austin, 2006), is one of the most important sources of information, as the subordinates can assess how well the hierarchic manager approaches organizing, planning, delegating, rewarding and other specific actions. The method emphasizes

* Corresponding author. Tel.: +4021.330.26.80;
E-mail address: alexandru.mihalcea@prof.utm.ro

any potential conflicts between the manager and employees and, if applied periodically, may lead to offering high attention to the team from its own manager (Corbin, 2012). There is a risk that the manager might give excessive attention to the subordinated personnel and misplace the importance of reaching economical performance objectives of the departments.

The construction procedure is based on the intuitive - rational method (content-related validation) (Minulescu, 2004; Anastasi & Urbina, 1997) of developing a psychological instrument. The construction of an instrument with good psychometric reliability and fidelity has been sighted for managing population of the above mentioned domain.

2. Method

2.1. Participants

Sample 1

Is represented by a sample of subjects who have participated to the initial phase of the instrument's building, respectively the descriptive exploration of employees' opinions and attitudes towards several constructs related to leadership. The sessions have been conducted with the involvement of experts within the companies, respectively 121 employees with executive position and 52 employees with managing positions. The participants were aged between 22 and 56 years old; the mean age was of 35 years old ($SD = 6.9$).

Sample 2

The sample of participants which has been assessed using MSF 360 (360 degree Management Skills Feedback), CPI 260 and MLQ: 100 employees aged between 24 and 51 years old, mean age of 33 years old ($SD = 6.5$). Collecting all information from the entire sample of 100 participants was not possible, therefore the number of subjects in different statistical processing may vary, being indicated as such.

2.2. Instruments

2.2.1. 360 degree Management Skills Feedback - MSF 360

Instrument Development

Following focus - group activities, the employees scored the following aspects as being important so the managers would be able to efficiently lead the team to performance.

Table 1 Attributes which characterize a good manager - according to the employees' perception (N=157)

Attributes which characterize a manager at most *	
Fairness	64%
Competence / organizing capacity	45%
Responsibility	44%
Supporting other people/amiability	39%

*The percentage represents the number of choices reported to the number of responding participants

Therefore we may notice that the employees appraise a good manager as being fair, competent, responsible and focused on supporting people. These also represented the scales we have developed in order to assess managing abilities through multiple sources (MSF 360).

Description of MSF 360 scales

The "Correct" scale sights the manager's capacity of keeping his objectivity towards the employees and work colleagues. It includes aspects such as: equitable distribution of work tasks, by avoiding to overcharge some

employees, rewarding and fining employees in an objective manner, according to specific results and not based on affinities, solving conflicts or misunderstandings within or between departments in a correct and un-biased manner.

The "Organized" scale refers to the manager's capacity to transmit information related to work tasks in a clear and precise manner. Also, the manager's ability to follow and supervise work tasks to their finality is assessed.

The "Responsible" scale investigates the colleagues', subordinates or direct hierarchic manager's opinions regarding the efforts of the evaluated manager to finalize tasks and reach the department's objectives. It also evaluates the involvement degree of the manager in the department's activity.

The last scale, "Amiable", sights the manager's capacity to give attention to employees' need of information, development and fulfillment. Thus, amiable managers are seen as being more available to others, encouraging them to openly express their thoughts, and promptly answering questions or requests of colleagues, coordinators or employees.

2.2.2. *California Psychological Inventory (CPI 260)*

In order to investigate personality we have utilized one of the most well-known instruments of the professional literature: California Psychological Inventory version 260, adapted and validated on Romanian population (Pitariu, Iliescu, Tureanu & Peleasa, 2006).

CPI is based on a set of 20 standardized scales, accompanied by a number of 16 additional scales which derive as significance out of the first mentioned. The primary scales are grouped on a methodological level in four classes (Pitariu, Iliescu, Tureanu & Peleasa, 2006): style and interpersonal orientation, value and norms orientation, cognitive and intellectual functioning, roles and personal style.

2.2.3. *Multifactor Leadership Questionnaire*

Multifactor Leadership Questionnaire (MLQ) identifies a series of leadership and management efficiency styles, from the passive - indifferent type towards the involved and error - identification centered style, to the leader who succeeds in motivating and supporting other people's development by preparing them to become leaders themselves (Iliescu, D., Beldean, F., & Sintion, F. 2007). The MLQ scales are structured within four categories, as the first three sight the leader's behavior and the fourth sights the leadership results.

2.2.4. *Performance indicators*

In a consistent manner to previous studies (Bass, Avolio, Jung & Berson, 2003), two performance indicators have been collected in order to obtain MSF 360 predictive and incremental validity scores: a) profit range, respectively the monthly mean of the department's profit range within the previous 12 months and b) department's errors, respectively the monthly mean number of errors within the department. The errors taken into account are the ones noticed in the official reports of specialized services: price errors, lack of products, issues related to quality product, etc. The indicator taken into consideration represents a mean based on the previous 12 months.

In the case of the profit range the high values indicate a high professional efficiency of the leader and the case of the errors, the high values indicate a lack of professional efficiency of the leader.

2.3. *Procedure*

The starting point in developing the MSF 360 was investigating the opinions and attitudes of the Sample 1 participants (focus - group) related to the importance of leadership behaviors in order to obtain performance with the work teams.

In order to select the focus group themes we considered as foundations the theories which California Psychological Inventory (CPI) and Multifactor Leadership Questionnaire (MLQ) are based on. In the case of CPI, Sam Manooch's model caught our attention regarding the managing area (Pitariu, Iliescu, Tureanu & Peleasa, 2006), as it allows the monitoring of managing activities and the development of managing abilities. According to these theories, 18 managing qualities are identified and grouped under five performance domains: Self-Management, Organizational Capabilities, Teamwork, Problem Solving and Sustaining the Vision. In the case of Multifactor Leadership Questionnaire special interest was given to descriptions and facets of transformational and

transactional leadership (Iliescu, Beldean & Sintion, 2007). Following the approaches we have mentioned above, we have extracted a list of managing abilities which has been put to an experts' group analysis with retail companies (Sample 1), respectively highly performing managers and employees.

3. Results

3.1. Reliability

The reliability analysis has been effectuated separately for each type of respondent and also on a global level. Therefore we have obtained internal consistency coefficients for the cases of subordinates, managers, colleagues and self-evaluation but also a global coefficient of the internal consistency.

The value of the global internal consistency coefficient has varied from .75 to .79 for all four scales. These values indicate an internal acceptable consistency of our instrument (Albu, 1998, McIntire & Miller, 2010).

Table 2 Reliability indicators for MSF 360

Scales		Correct (4 items)	Organized (3 items)	Responsible (3 items)	Amiable (3 items)	N
All assessments	Alfa Cronbach	0,765	0,784	0,797	0,754	415
Colleagues	Alfa Cronbach	0,812	0,837	0,860	0,867	117
Employees	Alfa Cronbach	0,763	0,743	0,754	0,722	198
Superiors	Alfa Cronbach	0,739	0,786	0,880	0,792	50
Self-assessment	Alfa Cronbach	0,520	0,708	0,621	0,469	50

Also, the internal consistency coefficients, calculated for each investigated population, show values which indicate a good internal consistency of the proposed instrument (as shown in the table above). The exception is shown by self-assessment. As a relatively short instrument is discussed (including 13 items), we may assert that this lack of internal consistency can be explained by socially desirable responses given by a part of the evaluated managers.

Considering the internal consistency coefficients presented above we may carefully interpret the results received during self-assessment.

3.2. Factorial validity

We have conducted a confirmatory factorial analysis (CFA) for MSF 360. The tested model has taken into account the existence of four interconnected latent factors. The assessment has been made considering the responses of all respondents, except self-assessment. The matching degree was an acceptable one (Popa, 2010) for RMSEA=0.06, CFI=0.96, chi-square/df=2.57

3.3. Convergent and discriminative validity

The convergent and discriminative validity has been checked by correlating the scores obtained for the MSF 360 with tasks which have represented its foundation: scale of CPI260 and MLQ. The Sample 2 subjects did not respond entirely to the tasks within our scientific research. Thus in the case of CPI scales, N = 93 and for the MLQN scales, N = 75.

The Correct scale purely correlates to the CPI scales, while the strongest correlation is with the second vector (compliance/opposing norms) of CPI 260 ($r=.35$, $p<.01$ other reports). Moderate correlations have been obtained for the MLQ scales: Idealized attributes $r=.63$, $p<.01$ others' reports and $r=.24$, $p<.05$ for self-reports. Also, the Correct scale correlates to the Contingent Reward scale which identifies leaders who are able to reward achievement ($r=.53$,

$p < .01$ other reports, $r = .26$, $p < .05$ for self-reports). No significant correlations have been obtained for the Laissez-Faire or Management-by-Exception: Active scale.

The Organized scale correlates to the following CPI scales: Leadership (Lp), $r = .31$, $p < .01$ -others' reports, Independence (In), $r = .33$, $p < .01$ -other reports and the Flexibility scale (Fx) $r = -.29$, $p < .01$ - other reports. No significant correlation was found with the Responsibility (Re) scale. High correlations are obtained for the MLQ scales: Intellectual Stimulation ($r = .55$, $p < .01$ other reports) and Laissez-Faire ($r = -.35$, $p < .01$; other reports).

The Responsible scale correlates with the CPI Tolerance scale $r = -.40$, $p < .01$ - other reports and with MLQ scales: Idealized Attributes ($r = .56$, $p < .01$ - other reports and $r = .40$, $p < .01$ self-report).

The Amiable Scale correlates to CPI scales such as Sociability (Sy) $r = 0.33$, $p < .01$ others' reports and Well-Being (Wb) $r = .31$, $p < .01$ - other' reports. As for the MLQ Amiable scale, it correlates to transformational scales ($r = .43$, $p < .01$ - other reports) and not with transactional scales.

3.4. Incremental Validity

We have examined the incremental validity of MSF 360 in predicting the profit range and errors within the managed department, next to personality and leadership traits. The MSF 360 scores have been given to the responses of all evaluations (without self-assessment).

Table 3. Incremental validity of MSF 360

Model Summary: Dependent Variable: Profit range

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.540 ^a	.292	.206	653,20093	.292	3,411	7	58	.004
2	.740 ^b	.547	.455	541,25923	.256	7,618	4	54	.000

Model Summary: Dependent Variable: Errors

1	.585 ^a	.342	.232	.93937	.342	3,193	7	43	.008
2	.779 ^b	.607	.496	.76253	.265	6,564	4	39	.000

a. Predictors: (Constant), Idealized behaviors (IB), Individual consideration (IC), Management-by-exception: active (MBE_A), Achievement via Conformism (Ac), Responsibility (Re), Socialization (So), Achievement via Independence (Ai)

b. Predictors: (Constant), IB, IC, MBEA_A, Ac, Re, So, Ai, Amiable, Organized, Correct, Responsible

The collinearity condition has been checked as the values of tolerance indicators have been placed within the .18 - .60 and the VIF (Variation Inflation Factor) within the 2.3 – 6.6.

The data presented in the above table show that the MSF 360 considerable increase the predictive ability of profit range and Errors, beyond that provided by scales of CPI 260 and MLQ.

4. Discussion

The present study brings to discussion a short instrument which can be rapidly utilized in order to assess the soft component of retail companies' management. It is based on the employees' perceptions from all hierarchic levels upon managerial performance within this type of company. We have studied the psychometric characteristics of the instruments: structural, convergent, divergent and incremental validity. The results have confirmed that the MSF 360 scales are different from a series of personality traits, obtaining mean or small correlations. From a conceptual point of view, the MSF 360 scales are closer to the leaders' characteristics, characteristics which represented the basis of the initial focus group discussions.

The incremental validity has demonstrated the increase of prediction capacity of the manager's performance, respectively the department errors and the profit range.

Among the instrument's limitations, we may bring to discussion the low number of respondents and therefore the low representativeness of the sample of subjects. Following studies are necessary in order to increase the reliability degree of MSF 360.

References

- Albu, M. (1998). *Construirea și utilizarea testelor psihologice*. Cluj-Napoca: Editura Clusium.
- Anastasi, A., Urbina, S. (1997) *Psychological testing (7th ed.)*. Prentice Hall, New Jersey.
- Bailey, C., & Austin, M. (2006). 360 Degree Feedback and Developmental Outcomes: The Role of Feedback Characteristics, Self-Efficacy and Importance of Feedback Dimensions to Focal Managers' Current Role. *International Journal of Selection and Assessment*, 14(1), 51-66.
- Bass, B., M., Avolio, B. J, Jung, D. I., Berson, Y (2003) Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, 88(2), 207-218. doi: 10.1037/0021-9010.88.2.207
- Brett, J. F., & Atwater, L. E. (2001), 360° feedback: Accuracy, reactions, and perceptions of usefulness. *Journal of Applied Psychology*, 86(5), 930.
- Corbin, A. K. (2012). *360-Degree Feedback*. Available at SSRN 2288194.
- Iliescu, D., Beldean, F., & Sîntion, F. (2007). *Manual tehnic și interpretativ al MLQ, Multifactor Leadership Questionnaire*. Cluj-Napoca: Sinapsis.
- Lepsinger, R., & Lucia, A. D. (2009). *The art and science of 360 degree feedback*. John Wiley & Sons.
- McIntire, A. S., & Miller, A. L. (2010). *Fundamentele testării psihologice*. Polirom.
- Minulescu, M. (2004). Psihodiagnoza modernă. Chestionarele de personalitate. București: România de mâine.
- Novac, C. (2006). *Evaluarea performanței angajaților*. Note de curs. SNSPA
- Pitariu, H. D., & Iliescu, D. (2004). California Psychological Inventory–CPI 260-RO. *Psychology of Human Resources Journal*, 2(1), 40.
- Pitariu, H., Iliescu, D., Tureanu, V., Peleașă, C. (2006) *Inventarul Psihologic California*, București: Psiho Cover.
- Popa, M. (2010). *Statistici multivariate aplicat în psihologie*. Iași: Polirom.